

Having described the invention, we claim:

1. A mask including:

a shell; and

a cushion connected with said shell;

said shell having a side wall, said shell having a retaining ring disposed inside said side wall, said side wall and said retaining ring defining a gap between said side wall and said retaining ring, said gap extending around said shell;

said cushion having a side wall with an outer peripheral edge portion including a tongue extending around said cushion;

said tongue of said cushion being received in said gap in said shell to secure said cushion to said shell.

2. A mask as set forth in claim 1 wherein said retaining ring has a notch adjacent said gap, said tongue having a flange extending transverse to said tongue, said flange being received within said notch to secure said cushion to said shell.

3. A mask as set forth in claim 2 wherein said shell side wall includes a plurality of projecting posts, said retaining ring having a plurality of sleeves receiving said posts to support said retaining ring on said shell.

4. A nasal mask including:

a shell; and

a cushion connected with said shell for engagement with the face of a user;

said cushion having a side wall, an inner wall extending transverse to said side wall, and an outer wall extending transverse to said side wall, said outer wall being adapted to engage and seal against a face of a user of the mask;

said outer wall of said cushion extending substantially completely around said cushion;

said inner wall of said cushion being discontinuous in a nasal bridge region of said cushion.

5. A nasal mask as set forth in claim 4 wherein said inner wall of said cushion is thicker and stronger than said outer wall of said cushion for supporting said outer wall.

6. A mask comprising:
a shell;
a cushion connected with said shell for engagement with the face of a user; and
a strap connectable with said shell for helping to hold said mask on the face of a user;
said shell having a shell connector including a first opening and a first tab;
said strap including a strap connector including a second opening and a second tab, said second tab being resiliently deflectable;
said strap connector being engageable with said shell connector by insertion of said first tab of said shell connector into said opening of said strap connector and deflection of said second tab of said strap connector to move said second tab to an interlocking position extending into said opening in said shell connector.

7. A mask as set forth in claim 6 wherein said shell connector includes a loop defining said opening in said shell connector, said first tab extending from loop, and said strap connector includes a loop defining said opening in said strap connector, said second tab extending from said loop in a direction into said second opening in said strap connector.

8. A mask as set forth in claim 7 wherein said loop of said shell connector is substantially planar and said first tab of said shell connector extends in a direction transverse to the plane of said loop, said loop of said strap connector being substantially planar.

9. A mask comprising:

a shell;

a forehead strap assembly for connection with said shell for helping to hold said shell on a user's head, said forehead strap assembly comprising a pin; and

a forehead adjuster connected between said shell and said forehead strap, said forehead adjuster comprising a hook engageable with said pin in a snap fit connection for connecting said forehead adjuster with said forehead strap assembly.

10. A mask as set forth in claim 9 wherein said hook is pivotable on said pin when connected with said pin for adjusting the angular position of said forehead adjuster relative to said forehead strap assembly.

11. A mask as set forth in claim 9 wherein said forehead adjuster has an arcuate engagement portion and a planar upper end portion, said hook being formed on said upper end portion, said pin extending generally horizontally when said forehead strap assembly is in use.

12. A mask comprising:

a shell;

a forehead strap assembly for connection with said shell for helping to hold said shell on a user's head; and

a generally T-shaped forehead adjuster having two arms connected between said shell and said forehead strap assembly, each one of said arms having respective inner and outer slots for receiving straps of said forehead strap assembly;

each one of said arms of said forehead adjuster having at least one spacer located between said inner and outer slots of said arm and extending in a direction of the user's forehead when said mask is in use to maintain said arm spaced apart from the user's forehead.

13. A mask as set forth in claim 12 wherein said forehead strap assembly includes strap portions extending through said inner and outer slots and between said spacers and the user's forehead to block contact between said spacer and the user's forehead when said mask is in use.

14. A mask as set forth in claim 13 wherein said spacers are formed as one piece with said forehead adjuster.

15. A mask comprising:

- a shell;
- a forehead strap assembly for connection with said shell for helping to hold said shell on a user's head; and
- a forehead adjuster connected between said shell and said forehead strap;
- said forehead strap assembly including first and second strap portions connected with and extending from opposite sides of said forehead adjuster;
- said forehead strap assembly further including a cushioning strap extending between said first and second forehead strap portions, said cushioning strap being located between said forehead adjuster and the user's forehead.

16. A mask as set forth in claim 15 wherein said cushioning strap has first and second slots located at opposite ends of said cushioning strap, said first forehead strap portion extending through said first slot in said cushioning strap, said second forehead strap portion extending through said second slot in said cushioning strap.

17. A mask as set forth in claim 15 wherein each one of said arms of said forehead adjuster has at least one spacer extending in a direction of the user's forehead when said mask is in use to maintain said arm spaced apart from the user's forehead, said cushioning strap extending between said spacers and the user's forehead to block contact between said spacer and the user's forehead when said mask is in use.

18. A mask comprising:

a shell;

a forehead strap assembly for connection with said shell for helping to hold said shell on a user's head; and

a forehead adjuster connected between said shell and said forehead strap;

said forehead adjuster being supported on said shell for arcuate sliding movement relative to said shell about an axis that is spaced apart from said shell.

19. A mask as set forth in claim 18 wherein said forehead adjuster has an arcuate engagement portion supported on an arcuate portion of said shell for relative sliding movement, thereby providing the only engagement supporting said adjuster for movement relative to said shell.

20. A mask as set forth in claim 19 including a manually depressible member on said arcuate portion of said shell for selectively positioning said forehead adjuster relative to said shell.

21. A mask as set forth in claim 20 including a pawl on said manually depressible member for engagement with teeth on said shell for adjustment in one direction by depressing said manually depressible member and for adjustment in an opposite direction without depressing said manually depressible member.

22. A mask as set forth in claim 18 including a pawl on said adjuster for engagement with teeth on said shell for adjustment in one direction by manually depressing said pawl and for adjustment in an opposite direction without manually depressing said pawl.

23. A mask including:

a shell; and

a cushion connected with said shell;

said shell having a wall defining a gas inlet aperture, said shell having an exhalation portion disposed below said gas inlet aperture, said exhalation portion comprising a plurality of circular openings extending through said side wall of said shell.

24. A mask as set forth in claim 23 wherein said openings are formed in a thickened portion of said side wall of said shell.

25. A mask as set forth in claim 23 wherein said exhalation openings are configured to vent at a thirty-five degree angle from vertical.